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Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A processor in a distributed environment comprised of hosts, each host instantiating a copy of a scalable application, the processor comprising:
 - an instrumentation collector that receives an instrumentation command from the host that executes the scalable application;
 - a quality of service manager that monitors the instrumentation command to determine application quality of the scalable application;
 - a history server that receives an operating system command from the host;
 - a host load analyzer that analyzes a load responsive to the history server to determine an operating load;
 - a resource manager that receives the application quality and the operating load to determine a resource allocation for the host; and
 - a program control that receives the resource allocation and a program signal from the distributed environment to control the host,wherein the instrumentation command includes a start up, a shutdown or and a move of a selected copy of the copies from the hosts, the system operating command based on a first information regarding performance of all copies of the scalable application and a second information regarding performance of the hosts.
2. (Previously Presented) A processor in a distributed environment comprised of hosts, each host instantiating at least one copy of a managed characteristic application, the processor comprising:
 - an instrumentation collector that receives an instrumentation command from the host that executes the managed characteristic application;
 - a quality of service manager that monitors the instrumentation command to determine application quality of the managed characteristic application;
 - a history server that receives an operating system command from the host;

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a host load analyzer that analyzes a load responsive to the history server to determine an operating load;

a resource manager that receives the application quality and the operating load to determine a resource allocation for the host; and

a program control that receives the resource allocation and a program signal from the distributed environment to control the host,

wherein the instrumentation command orders at least one of a start up of, a shutdown and a move of the copy of the managed characteristic application, the operating system command is based on a first information regarding performance and status of all applications including all copies of the managed characteristic application and a second information regarding the performance of the host.

3. (Previously Presented) The ~~program control device~~ processor as recited in claim 2, wherein the managed characteristic application comprises a scalable application.

4. (Previously Presented) The ~~program control device~~ processor as recited in claim 2, wherein the managed characteristic application comprises a fault tolerant application, where the degree of fault tolerance is selectable by a user.

5. (Previously Presented) The ~~program control device~~ processor as recited in claim 2, wherein the managed characteristic application comprises a selectable priority application.

6. (Previously Presented) The ~~program control device~~ processor as recited in claim 2, wherein the managed characteristic application further responds to user-initiated control actions.

7. (Previously Presented) The ~~program control device~~ processor as recited in claim 2, wherein the program control device modifies the configuration of the managed characteristic application responsive to instantaneous tasking by a user.

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8. (Previously Presented) A processor in a distributed environment comprised of hosts instantiating a copy of a managed characteristic application, the processor comprising: an instrumentation collector that receives an instrumentation command from the host that executes the scalable application;

a quality of service manager that monitors the instrumentation command to determine application quality of the scalable application;

a history server that receives an operating system command from the host;

a host load analyzer that analyzes a load responsive to the history server to determine an operating load;

a resource manager that receives the application quality and the operating load to determine a resource allocation for the host; and

a program control that receives the resource allocation and a program signal from the distributed environment to control the host,

wherein the instrumentation command includes start up, configuration, shutdown and moving of a selected one of the managed characteristic applications, the system operating command is based on a first information regarding performance and status of all running applications including all of the managed characteristic applications, a second information regarding performance of the hosts, and a third information regarding performance of the distributed environment.

9. (Previously Presented) The ~~program control device~~ processor as recited in claim 8, wherein the managed characteristic application comprises a scalable application.

10. (Previously Presented) The ~~program control device~~ processor as recited in claim 8, wherein the managed characteristic application comprises a fault tolerant application, where the degree of fault tolerance is selectable by a user.

11. (Previously Presented) The ~~program control device~~ processor as recited in claim 8, wherein the managed characteristic application comprises a selectable priority application.

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12. (Previously Presented) The ~~program control device~~ processor as recited in claim 8, wherein the managed characteristic application further responds to user-initiated control actions.

13. (Previously Presented) The ~~program control device~~ processor as recited in claim 8, wherein the program control device modifies the configuration of the managed characteristic application responsive to instantaneous tasking by a user.

14. (Currently Amended) A processing program recordable on a program storage device readable by an electronic processor that tangibly employs the processing program of instructions executable on a ~~the~~ processor disposed in a grid system that includes N hosts instantiating M managed characteristic applications instantiated by and located on at least the N hosts, the processing program comprising:

instructions for to enable an instrumentation collector to receive an instrumentation command from the host that executes the M managed characteristic applications, wherein N program control agents residing on a respective one of the N hosts and providing control over startup, configuration, moving, and shutdown of applications on a respective one of the N hosts;

instructions for to enable a quality of service manager to monitor the instrumentation command and to determine application quality of the M managed characteristic application applications;

instructions for to enable a history server to receive an operating system command from the N hosts, the operating system command being based on information regarding performance and status of all of the M managed characteristic applications;

instructions for to enable a host load analyzer to analyze a load responsive to the history server to determine an operating load;

instructions for to enable a resource manager to receive the application quality and the operating load and to determine a resource allocation for the N hosts; and

instructions for to enable a program controller operatively coupled to the N program control agents, wherein the program controller receiving-receives one of the interactive and automatic application control requests and generates specific control orders which are sent to the individual N program control agents responsive thereto;

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where N and M are positive integers.

15. (Previously Presented) The processing program as recited in claim 14, wherein the specific control orders include one of startup orders permitting instantiation of an $(M+1)^{\text{th}}$ managed characteristic application or shutdown and configuration orders permitting a status change regarding one of the M managed characteristic applications.

16. (Previously Presented) The processing program as recited in claim 14, further comprising:

instructions for K program control displays permitting interactive control of distributed applications,

where K is a positive integer.

17. (Previously Presented) The processing program as recited in claim 16, wherein the K program control displays depict current status and the configuration of the M managed characteristic applications.

18. (Previously Presented) The processing program as recited in claim 16, wherein the K program control displays depict current status of all applications instantiated on the grid system.

19. (Previously Presented) The processing program as recited in claim 16, wherein each of the K program control displays comprises a graphical user interface permitting a user to determine the status of each of the N program control agents and the program controller.

20. (Previously Presented) The processing program as recited in claim 16, wherein the K program control displays respond to one or more L configuration files, wherein L is a positive integer.

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21. (Previously Presented) The processing program as recited in claim 20, wherein each of the K program control displays permits a user to one of create new configuration files and edit an existing one of the L configuration files.
22. (Previously Presented) The processing program as recited in claim 20, wherein selected ones of the L configuration files correspond to predefined scenario configurations.
23. (Previously Presented) The processing program as recited in claim 14, wherein the specific control orders permit a subset of the M managed characteristic applications to be started and stopped.
24. (Previously Presented) The processing program as recited in claim 23, wherein all of the M managed characteristic applications in the subset are started and stopped simultaneously.
25. (Previously Presented) The processing program as recited in claim 23, wherein the M managed characteristic applications in the subset are started and stopped in a predetermined sequence.
26. (Previously Presented) The processing program as recited in claim 23, wherein all of the M managed characteristic applications in the subset are started and stopped in a predetermined sequence having a respective delay time between each event in the predetermined sequence.
27. (Previously Presented) The processing program as recited in claim 23, wherein a first subset of the M managed characteristic applications comprise scalable applications and a second subset of the M managed characteristic applications comprise fault tolerant applications, where the degree of fault tolerance is selectable by a user.
28. (Previously Presented) The processing program as recited in claim 23, wherein a first subset of the M managed characteristic applications comprise selectable priority applications and

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a second subset of the M managed characteristic applications comprise fault tolerant applications, where the degree of fault tolerance is selectable by a user.

29. (Previously Presented) The processing program as recited in claim 23, wherein a first subset of the M managed characteristic applications comprise scalable applications, a second subset of the M managed characteristic applications comprise fault tolerant applications, where the degree of fault tolerance is selectable by a user, and a third subset of the M managed characteristic applications comprises selectable priority applications.

30. (Previously Presented) The processing program as recited in claim 14, wherein the M managed characteristic applications comprise scalable applications.

31. (Previously Presented) The processing program as recited in claim 14, wherein the M managed characteristic applications comprise fault tolerant applications, where the degree of fault tolerance is selectable by a user.

32. (Previously Presented) The processing program as recited in claim 14, wherein the M managed characteristic applications comprise selectable priority applications.

33. (Previously Presented) The processing program as recited in claim 14, wherein:
each of the N hosts operates in accordance with a selected one of R operating systems;
the N program control agents implement the orders via system call mechanisms specific to the particular operating system of a corresponding one of the N hosts;

R is a positive integer; and

N is greater than or equal to R.

34. (Previously Presented) The processing program as recited in claim 14, wherein each of the N program control agents provides feedback to the program controller regarding the current status and configuration of all applications running on a respective one of the N hosts, and

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provides feedback to the program controller regarding host status for the respective one of the N hosts.

35. (Previously Presented) The processing program as recited in claim 14, further comprising:

K program control displays permitting interactive control of distributed applications, wherein:

each of the K program control displays comprises a graphical user interface permitting a user to determine the status of each of the N program control agents and the program control function;

each of the K program control displays responds to a respective subset of L configuration files, wherein K and L are positive integers, and wherein K, L, and N may be equal to or different than one another; and

the program controller, using information from specification files different than the L configuration files, generates the specific control orders by translating the control function requests into the specific control orders.

36. (Currently Amended) A processing program recordable on a program storage device readable by an electronic processor that tangibly employs the processing program of instructions executable by the processor disposed in a distributed environment that includes N hosts instantiating M managed characteristic applications and instantiated by at least the N hosts, the processing program comprising:

instructions for to enable an instrumentation collector to receive an instrumentation command from the host that executes the M managed characteristic applications, wherein N program control agents residing on a respective one of the N hosts and providing direct control over startup, configuration, moving, and shutdown of applications on the respective one of the N hosts;

instructions for to enable a quality of service manager to monitor the instrumentation command and to determine application quality of the M managed characteristic application applications;

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instructions ~~for to enable~~ a history server to receive an operating system command from the N hosts, the operating system command being based on information regarding performance and status of all of the M managed characteristic applications;

instructions ~~for to enable~~ a host load analyzer to analyze a load responsive to the history server to determine an operating load;

instructions ~~for to enable~~ a resource manager to receive the application quality and the operating load and to determine a resource allocation for the N hosts;

instructions ~~for to enable~~ a program controller operatively coupled to the N program control agents, which receives one of user-initiated and program initiated application control requests and information comprising first information regarding performance and status of all running applications, including all of the managed characteristic applications, second information regarding performance of the hosts, and third information regarding performance of the distributed environment, and which generates specific control orders which are sent to the individual N program control agents responsive thereto; and

instructions ~~for to enable~~ K program control displays permitting generation of the user-initiated application control requests applied to the program controller, wherein:

each of the K program control displays instantiates a graphical user interface permitting a user to determine the status of each of the N program control agents and the program control function;

each of the K program control displays responds to a respective subset of L configuration files;

the program controller, using information from specification files different than the L configuration files, generates the specific control orders by translating the control function requests into the specific control orders; and

K, L, M and N are positive integers.

37. (Previously Presented) The processing program as recited in claim 36, wherein the specific control orders include one of startup orders permitting instantiation of an $(M+1)^{\text{th}}$ managed characteristic application or shutdown, and configuration orders permitting a status change regarding one of the M managed characteristic applications.

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38. (Previously Presented) The processing program as recited in claim 36, wherein:
each of the N hosts operates in accordance with a selected one of R operating systems;
the N program control agents implement the orders via system call mechanisms specific
to the particular operating system of a corresponding one of the N hosts;

R is a positive integer; and

N is greater than or equal to R.

39. (Currently Amended) Software stored on at least one host for converting N networked
hosts into a resource managed system instantiating M managed characteristic applications, the
software comprising:

instructions ~~for to enable~~ a first function group ~~which monitors to monitor~~ the host and
network resources;

instructions ~~for to enable~~ a second function group ~~which provides to report~~ general-
purpose application event ~~reporting occurrences~~ and event correlation capabilities to determine
performance and status of the M managed characteristic applications;

instructions ~~for to enable~~ a third function group ~~which provides to provide~~ the reasoning
and decision-making capabilities for the resource managed system to determine an operating
load; and

instructions ~~for to enable~~ a fourth function group ~~which provides to provide~~ program
control capabilities permitting starting, stopping, moving, and configuring of selected ones of the
M managed characteristic applications on respective ones of the N hosts in the resource managed
system, based on the performance and the status of all of the M managed characteristic
applications, the fourth function group further comprising:

_____ instructions ~~for to enable~~ N program control agents ~~residing that reside~~ on a
respective one of the N hosts and ~~providing to provide~~ direct control over startup, configuration,
and shutdown of the selected ones of the M managed characteristic applications on the respective
one of the N hosts; and

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_____instructions ~~for to enable~~ a program controller operatively coupled to the N program control agents, ~~the program controller determining to determine~~ a resource allocation for the M managed characteristic applications in response to the operating load,
_____wherein the program controller receives one of interactive and automatic application control requests and generates specific control orders which are sent to the individual N program control agents responsive thereto,
wherein the automatic application control request is generated by the third function group, and
_____wherein M and N are positive integers, ~~and~~.

40. (Previously Presented) The software as recited in claim 39, wherein the specific control orders include one of startup, shutdown, and configuration orders.

41. (Previously Presented) The software as recited in claim 39, wherein the fourth function group further comprises:

K program control displays permitting interactive control of the M managed characteristic applications.

42. (Previously Presented) The software as recited in claim 41, wherein each of the K program control displays comprises a graphical user interface permitting a user to determine the status of each of the N program control agents and the program controller.

43. (Previously Presented) The software as recited in claim 41, wherein the K program control displays respond to L configuration files, wherein L and K are positive integers.

44. ((Previously Presented) The software as recited in claim 43, wherein each of the K program control displays permits a user to one of create a new configuration file and edit an existing one of the L configuration files.

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45. (Previously Presented) The software as recited in claim 43, wherein selected ones of the L configuration files correspond to predetermined scenario configurations.

46. (Previously Presented) The software as recited in claim 39, wherein:
each of the N hosts operates in accordance with a selected one of R operating systems;
the N program control agents implement the orders via system call mechanisms specific to the particular operating system of a corresponding one of the N hosts; and
N and R are positive integers and N is greater than or equal to R.

47. (Previously Presented) The software as recited in claim 39, wherein each of the N program control agents provides feedback to the program controller regarding the current status and configuration of all applications running on a respective one of the N hosts.

48. (Previously Presented) The software as recited in claim 39, wherein the fourth function group further comprises:

K program control displays permitting interactive control of distributed applications,
wherein:

each of the K program control displays comprises a graphical user interface permitting a user to determine the status of each of the N program control agents and the program controller;

each of the K program control displays responds to a subset of L configuration files,
wherein L and K are positive integers; and

the program controller, using information from specification files different than the L configuration files generates the specific control orders by translating the control function requests into the specific control orders.